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A NOTE ON AMOS EATON'S HERBARIUM

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THERE are several bits of evidence which suggest that Amos Eaton made extensive collections of plants in northeastern America. He traveled over much of the region lecturing on botany and geology, and is known to have covered about 17,000 miles on trips in the region during his geological surveys. He corresponded with numerous amateur botanists from widely separated localities as well as with such eminent men as Nuttall, LeConte, Eddy, and Rafinesque. He doubtless exchanged specimens with them for several of these authors named specimens in honor of Eaton. The preface of the seventh edition of his manual informs us that he acquired collections from others. The publication of "A Manual of Botany for the Northern States," the first of its kind for this region and the precursor of Gray's Manual, certainly implies that he made extensive collections. It is known that students at Williams collected all sorts of Natural History specimens, including plants, under his direction. In fact, his Williams students were so delighted with the work which he presented in botany that they raised the funds among themselves for the publication in 1817 of the first edition of his manual. We know also that he emphasized the need for collecting in connection with the study of plants and gives minute directions for collecting and preserving specimens. Ballard¹ states that Eaton began an herbarium while studying at Yale in 1815-16 and quotes Albert Hopkins to the effect that Eaton collected in the swamps of Pownal, Vermont.

¹ Ballard, *Amos Eaton, a pioneer of science in Berkshire County*, Collections of the Berkshire Historical and Scientific Society, Pittsfield, Mass., 1897.

In spite of this evidence that Eaton had an extensive collection, repeated inquiries by various interested students at the several institutions with which Eaton was connected have failed until recently to turn up a single one of Eaton's specimens. Miss Day¹ found no trace of Eaton's plants in her survey of the herbaria of New England. Ballard reports that Eaton's geological collections were probably destroyed by a fire at the Rensselaer Polytechnic Institute and his plants may have gone the same way. The author has gone over the Williams records and collections with care without finding a trace of his collection. If any of his plants had been left at Williams, they would probably have been lost in the fire which in 1855 partially destroyed the extensive collections of the Williams College Lyceum of Natural History.

Ballard mentions giving two sheets from Eaton's herbarium to the Berkshire Historical and Scientific Society. The Director of the Berkshire Athenaeum at Pittsfield, Mass., reports that the two sheets are on file in the Athenaeum vaults. One has a specimen labelled *Poa canadensis*. The second is labelled:—Class III, *Briza canadensis* W and *Dactylis glomerata* W and *Poa spectabilis* June 11th. The third specimen of the second sheet is missing.

The above evidence turned up while the author was making inquiries at several institutions in preparation for an exhibit of early science at Williams held in connection with the celebration of the Mark Hopkins Centenary. In addition, a letter from Professor A. W. Bray of the Rensselaer Polytechnic Institute gave high hopes that a more extended collection of Eaton's material might be in existence. It appears that President Ricketts of the Institute turned over a small portfolio of plants to Professor Bray a few years ago. It had been picked up in an abandoned farmhouse in the South during the Civil War. No details of its rescue are known.

The following label was written on the back of the folio: Botany, Rensselaer School, 1830, Vol. 5. It contained 111 specimens mounted on coarse paper five by six inches in size. Excluding duplicates, there were 104 species. Most interesting and conclusive is the fact that each specimen is *labeled in Eaton's handwriting*. Each label gives the name of the plant, a locality, the month, the year 1830, and a system of numbers.

¹ Day, *Local Floras of New England and Herbaria of New England*, RHODORA, I, II, and III.

Most of the labels give Troy as the locality but Albany, Fort Erie, Fort Oswego, New York City, Salina, Schenectady, and Scaighticoke are also included. The months range from April to October. The system of numbers corresponds to that used in the several editions of Eaton's Manual. The system includes the class and order of Linnaeus' artificial system, the natural order of Linnaeus, and the order of Jussieu. The latter also appears on the back of each specimen apparently as an aid in filing as recommended by Eaton. The names of the plants correspond to those of the seventh edition of the Manual published in 1836.

One of the following names—Houghton, Stevenson, Wright, and Fox—appears on about half the labels. All but Fox are mentioned specifically in both the sixth and the seventh editions of the Manual as correspondents whose opinion Eaton followed on matters of distribution. Wright doubtless refers to Dr. John Wright who assisted in the preparation of the eighth edition of the Manual. It seems likely that these men collected the specimens although the labels were written by Eaton. Houghton's name is spelled incorrectly in one instance which indicates that he did not make the label. This together with the more positive fact that the labels are in Eaton's handwriting make it reasonable to suppose that the specimens were in Eaton's possession.

The date, the localities, the correspondents, the system of numerals, and most important, the handwriting all give evidence that the plants were actually Eaton's.

Professor Bray was kind enough to loan the folio for exhibition at Williams during the Mark Hopkins Centenary. It has been returned to him and may be consulted at the Biological Laboratories at the Rensselaer Polytechnic Institute.

WILLIAMS COLLEGE.

ARABIS IN EASTERN AND CENTRAL NORTH AMERICA

MILTON HOPKINS

(Continued from page 148)

12. *A. VIRIDIS* Harger. Biennial from a spreading tap-root: stem 2-5 dm. high, branched at base or above or more rarely simple, leafy, averaging 25 internodes to the first flower, glabrous throughout, (pubescent in the var.) bright green: radical leaves rosulate, lanceolate